

residual hearing to the extent that they can. Many AG Bell members wish to be able to find usable digital wireless service, while others are parents whose children are unable to use wireless phones.

I Background

When Congress passed the Hearing Aid Compatibility Act, in 1988, it authorized the Commission to exempt telephones used with public mobile services and private radio services. Thus digital wireless service, introduced 1996, was subject to the exemption.² In response AG Bell and the other members of HEAR-IT Now petitioned for the removal of the exemption, and, subsequently, participated in the Digital Wireless Summit. This Summit was convened to discuss voluntary efforts by the wireless and hearing technology industries toward providing access. As a result of this meeting, industry representatives promised to promote access through significant voluntary efforts³. Unfortunately, in 2002, deaf and hard of hearing Americans remain without consistent access to this increasingly vital communication technology. This six- year failure of the voluntary effort has convinced us that the only way that people who rely on hearing technology will be assured of access is by the removal of the exemption by the FCC.

II The criteria for revocation or limitation of the exemption have been satisfied

The HAC Act requires that the FCC revoke or limit the exemption for digital wireless phones if it determines that four criteria have been met:

- (i) such revocation is in the Public interest;
- (ii) continuation of the exemption without such revocation or limitation would have an adverse effect on hearing impaired individuals;
- (iii) compliance with the requirement of the [the rule] is technologically feasible for the telephones to which the

²47 CFR §68.4.

³Thomas Wheeler, Proposal of the Wireless Industry, April 29, 1996, pp. 3-4.

- exemption applies; and
- (iv) compliance with the requirements of [the rule] would not increase the costs to such an extent that the telephones to which the exemption applies could not be successfully marketed.⁴

Comments from Cellular Telecommunications and Internet Association (CTIA) the Telecommunications Industry Association (TIA) and Verizon Wireless during the Commission's response to the request by the Wireless Access Coalition (WAC) indicated that the coalition had not "demonstrated that a basis exists for the Commission to determine that all four requirements . . . had been met."⁵ However, AG Bell believes that the Commission has correctly concluded that all four of these criteria have been met.

A Revocation of the exemption is in the public interest

There can be no doubt that the role of wireless communication in American society has increased dramatically since digital service was introduced in 1996. As the NPRM notes, the number of options and the quality of services and features available to digital customers has increased dramatically. Employers are increasingly requiring that employees use these devices to remain available while out of the office.⁶ Service has even improved to the point where at least one digital wireless service provider is claiming that the wireless service can effectively replace traditional wireline phone service.⁷

Unfortunately, for those consumers who are deaf and hard of hearing, the

⁴47 U.S.C. § 610(b)(2)(C); 47 C.F.R. § 68.4(a)(4)

⁵In the Matter of: HEAR-IT NOW Petition for Rule making Section 68.4 of the Commission's Rules: Hearing Aid Compatible Telephones RM-8658, Reply Comments of the Telecommunications Industry Association, January 8, 2001 p. 1

⁶Sam Goody Comments 11/11/00

⁷Voice Stream Commercials

ability to use these enhancements is severely restricted, and often completely unavailable. Such users face a limited range of choices for handsets and features. They may be required to use expensive and inconvenient accessories, or they may be limited to the options remaining for analog service.

This situation places individuals who rely on hearing technology at a significant disadvantage. It makes them less available to potential employers. It limits the ability of their friends and family to stay in contact with them. Finally, it restricts the ability of wireless carriers to attract them as customers.

Any one of these conditions detracts from the public good. This detriment is recognized by the wireless industry which has stated its understanding of the desire of deaf and hard of hearing consumers to use their services. In comments opposing the petition to reopen this Rulemaking, TIA stated: "The industry well understands that consumers with hearing impairments seek access to digital telecommunications products on the same terms as persons without disabilities."⁸ The same expression is echoed by CTIA: "Despite these challenges, the summit participants have remained steadfast in their efforts to resolve the EMC (electromagnetic compatibility) issue and to provide the benefits of wireless telecommunications to all consumers, including consumers with hearing impairments."⁹

⁸TIA, Reply comments p. 2.

⁹In the Matter of: HEAR-IT NOW Petition for Rule making Section 68.4 of the Commission's Rules: Hearing Aid Compatible Telephones RM-8658, Comments of the Cellular Telecommunications Industry Association, July 17, 1995, p. 2.

In addition, ensuring accessible digital phones has the potential to enhance the efficient use of the radio spectrum. We note that many in the wireless industry are currently calling for the elimination of rules regarding analog cellular phones and an eventual elimination of that service.¹⁰ AG Bell and others opposed any change in the cellular regulations because, currently, many consumers who rely on hearing aids or cochlear implants and are able to use digital wireless service, and rely on analog phones.¹¹ If these consumers gain reliable access to digital technology, they would not require the "safe haven" of analog service. This, in turn would reduce or eliminate one of the most important obstacles to the phase out of analog service. Since the industry has stated that the elimination of analog service requirements would allow for more efficient use of the radio spectrum, this could be an important step in helping to improve service and lower costs for all wireless customers.

Thus, guaranteeing access to digital wireless phones will increase the market for these devices, improve the ability of employers to attract and retain employees who are deaf or hard of hearing, provide all consumers with equal access to modern telecommunications, and pave the way for more efficient use of the radio spectrum. Given the industry's concurrence of the importance of this tool to deaf and hard of hearing consumers, the Commission has a clear basis to demonstrate that the removal of the exclusion is in the public interest.

B Revocation of the exemption will benefit people with hearing disabilities

We concur with the Commission's conclusion that a failure to revoke the exemption will have an adverse effect on people who are deaf and hard of hearing.

¹⁰See for example, TIA, In the Matter of: Year 2000 Biennial Regulatory Review Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and Other Commercial Mobile Radio Services, WT Docket Number 01-108, p. 5.

¹¹AG Bell In the Matter of: Year 2000 Biennial Regulatory Review Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and Other Commercial Mobile Radio Services, WT Docket Number 01-108

There are more than six million people in this country who use hearing aids. Many of these consumers remain unable to use digital wireless service, and are limited to the options available with analog. The current situation imposes unfair limitations on their ability to obtain the same telephone service as all other consumers. As the Notice of Proposed Rulemaking notes:

...as long as the exemption to the hearing aid compatibility rule continues in effect, the incompatibility between digital wireless devices and hearing aids and cochlear implants will continue to prevent users of the these devices from having full access to digital wireless services and products.”¹²

An internal survey of our members reinforces the conclusion that this condition is a detriment to their lives. Individuals continue to have difficulty using digital wireless phones, and that difficulty has an adverse effect on their lives and their ability to earn a living. For example, one member noted that he was required to have access to a wireless phone for his job, but that he was only able to use a Motorola handset which uses a speaker known as Direct Connect. This device not only leaves him without privacy in his conversations, but also, limits his ability to obtain customer service.¹³ Others commented on the excessive inconvenience and expense from using loopsets and other accessories.¹⁴ Other members experience static and “buzzing” in their hearing aids when using wireless handsets.¹⁵

These people and others will certainly benefit from having access to digital wireless phones which are useable with their hearing technology. Further, although some individuals have been able to find wireless handsets which can be used with their hearing technology, even these people would benefit from an increased number of choices among phones. In the current market, only two manufacturers, Nokia and Motorola, have models which can be used with t-coil equipped hearing aids. Both of these phones require external devices to achieve this accessibility.

¹²NPRM ¶ 22.

¹³Paul Jennison Email to AG Bell 12/15/01

¹⁴Sarah E. Sommer, email to AG Bell 12/30/01.

- C It is technologically feasible to produce wireless phones which are useable by people who rely on hearing aids or cochlear implants**

¹⁵Dana Hughes Interview at AG Bell.

AG Bell makes no claim to possessing facilities to design wireless phones, or to test their compatibility with hearing technology. Nonetheless we believe that there is sufficient evidence to support the contention that it is eminently possible to produce useable wireless phones. First and foremost it has become clear, particularly in recent months, that some deaf and hard of hearing consumers have been able to obtain digital wireless phones which can be effectively used with their hearing technology.¹⁶ Several of our members have noted that phones manufactured by Samsung seem to be especially likely to be useable.¹⁷

This anecdotal evidence is supported by the information included in the reply comments of Dana Mulvaney. This reply cited conversations with two representatives of Samsung who indicated that their company had produced three phones with the expressed goal of accessibility. The representatives, further, noted that there had been no reports of interference experienced with these phones.¹⁸

Second, the industry's claims that accessible phones are not feasible are either unsupported or, in fact, contradicted by its own statements. In previous comments on this issue, CTIA and TIA asserted that it was not technologically feasible to produce hearing aid compatible phones. Neither organization, however, provided any supporting documentation for this assertion. On the contrary, CTIA's web site includes an accessibility information section which suggests that consumers may choose among options that include t-coil capacity.¹⁹

¹⁶Tina Pinkham Email to AG Bell 12/15/01, John Flanders Statement to AG Bell 12/14/01.

¹⁷Based on interviews with Donna Sorkin, Dana Hughes, statement by John Flanders.

¹⁸Dana Mulvany Reply Comments p.1

¹⁹http://www.wow-com.com/consumer/access_wireless/articles.cfm?ID=372

AG Bell also cites the information available through the new American National Standards Institute (ANSI) standard for measuring the interference between hearing aids and digital wireless handsets.²⁰ The industry claims that the establishment of the standard is an example of the success of its voluntary efforts. Unfortunately, it only offers a matrix which may allow a comparison of the amount of interference between a given hearing aid and wireless handset. The standard does not in and of itself improve access for any users of hearing technology. It does, however, demonstrate that some handsets are less likely to cause interference. The existence of this difference is a clear indication that there are technologically controllable factors which can improve accessibility.

While these two observations do not constitute air tight proof of the technical feasibility of compatible phones, they are particularly persuasive in light of the fact that the industry has failed to provide any contrary evidence. Indeed, beyond citing the testing related to the development of the new ANSI standard, no comments state that such testing has taken place. Given this, it is entirely reasonable for the Commission to have determined that such phones are technologically feasible.

D Requiring that digital wireless phones are accessible will not increase the cost to such an extent that they cannot be successfully marketed

According to the Cellular Telephone and Internet Association, there are currently 128,756,840 wireless subscribers in the United States.²¹ These subscribers are expected to spend \$306.6 billion for wireless services in 2001, up from \$222.9 billion in 2000.²² Given the breadth of this market and the huge revenues generated, we find it extremely difficult to suppose that the increased cost of creating accessible wireless phones would be so high as to make service uncompetitive.

²⁰American National Standards Institute (ANSI) ANSI C63.19-2001, Standard Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids.

²¹<http://www.wow-com.com/industry/stats/surveys/> as of 8:45 AM 1/4/02.

²²eMarketer Inc. *Telecommunications Spending Report 2001* at http://www.emarketer.com/ereports/telecom_spend/excerpt.html?page=1

We, further, note that since digital wireless service was introduced, the cost for consumers has steadily decreased. Carriers are now offering as much as 3500 minutes of service per month for \$35.²³ In addition, handsets have also come down in price. Indeed carriers often provide a phone free to new subscribers.

We contrast these figures with the revenues of the hearing technology industry. Manufacturers of hearing aids and cochlear implants have made significant changes to their products to make them more useable with digital wireless phones. Yet, despite the fact that the hearing aid and cochlear implant industry is tiny when compared to the wireless carriers, they have not been forced to increase the prices of their products to the point that they have become unmarketable.

III The resultant regulation must reflect and address the needs of people who are deaf and hard of hearing

²³http://www.verizonwireless.com/special_offers/splash/splash1.html

AG Bell believes that the goal of the HAC act is to ensure that people who are deaf and hard of hearing will have access to phones which they are able to use. Toward this end, the FCC established a set of technical standards for telephones which makes them compatible with t-coil equipped hearing aids.²⁴ In the case of digital wireless phones, the NPRM implies that the Commission believes additional steps may be needed to achieve usability. AG Bell believes that the particular problems with digital wireless phones mean that the Rulemaking must address the issue on a broader scope than a simple requirement that handsets include t-coil compatibility.

A. The Commission should eliminate the exemption for wireless phones

AG Bell believes that the Commission should entirely revoke the exemption. We are concerned that limitation poses too great a potential for deaf and hard of hearing consumers to be left in an unacceptably inferior position to other consumers.

²⁴47 C.F.R. §68.316.

The exemption for digital phones was included when the service was new and had not reached its current place in the communications market. As the NPRM notes, Congress intended that the exemption should be removed when wireless service “. . . moved from being “specialized second phones” to substitutes for wireline telephones.”²⁵ We believe that this time is at hand. We note that one wireless carrier, Voicestream, is currently advertising its service as a replacement for wireline service. Another, Sprint PCS, offers radio advertisements suggesting that users take wireless service because the long distance charges are less than those for wireline phones. All of this indicates that wireless service has become too central a factor in the communications market to allow providers to continue to discriminate against consumers who are deaf or hard of hearing.

The only acceptable basis for a limitation would apply if it can be proven to the Commission that the features required for hearing aid compatibility cannot coexist in the same handset with another important phone feature. For example, if the industry can prove that it is not possible to have a voice-dial feature in a phone that is hearing aid-compatible, then the regulation should allow the production of such phones. In any other situation, experience causes us to fear that each provider will offer only one compatible phone. This could mean that consumers who require compatibility will be deprived of other important and desirable features.

B. The regulations must require digital wireless phones that do not interfere with hearing aids or cochlear implants

²⁵NPRM ¶ 14.

When the Commission promulgated the HAC regulations for landline phones, the primary issue was the fact that the acoustic signal generated by the handset speaker was often not adequate for the hearing aid user. The regulation addressed this problem by establishing technical standards for electromagnetic coupling between the handset, and specially equipped hearing aids.²⁶ In the case of digital wireless phones, however, the requirements needed to ensure access are necessarily complicated by the fact that digital wireless phones potentially present two problems for the user who also requires hearing aids or a cochlear implant, acoustic signal and direct interference. Consequently, to be effective, the regulations must address the HAC compatibility requirement in §68.316, but also ensure that the interference problem does not leave the phone unusable.

In paragraph 16 of the NPRM, the Commission tentatively concluded that when the exemption is removed, the industry will be required to develop technical standards for hearing aid compatibility. We strongly support this conclusion. However, we note that the technical standards must not be limited to the specifications for a device that can effectively convey a signal to the t-coil of a hearing aid. Such standards must also include specification for phones that will not cause interference with a hearing aid or cochlear implant. To do otherwise would be an exercise in futility, creating a phone which works with the user's t-coil but also causes interference with the normal function of the aid.

We believe that this also addresses the Commission's question in Paragraph 18 of the NPRM regarding hearing aids which are not designed to be compatible. Most of the hearing technology sold today does not include t-coil capacity. However, if the new technical standards address the interference issue for compatible phones, they should also make the handsets usable by people whose hearing technology does not include the t-coil.

Finally, we believe that the modifications must be internal. The comments of our members and other hearing technology users have all indicated that external devices, such as plug in microphones, or "neck loops" are cumbersome, expensive,

²⁶47 C.F.R. §69.316.

and inferior to the options available to consumers with normal hearing. We would strongly oppose any regulation that defined accessibility in terms of the ability to attach and use such devices.

C There must be interim changes to give deaf and hard of hearing consumers the best chance to obtain a useable phone with the current technology

AG Bell understands that the process of establishing new technical standards and bringing improved wireless handsets to the market is not an easy task, nor is it one that we expect can be completed immediately. However, these facts do not diminish the fact that consumers who rely on hearing aids and cochlear implants need to have access to wireless telephone service now. We believe that, even with the current technology, many or even most people who rely on hearing aids or cochlear implants have a chance of obtaining a phone that they can use. In order for these people to take advantage of this possibility, the procedures for the sale of digital wireless phone service should be modified to accommodate their needs.

We believe that the providers of service should be encouraged to educate their retail representatives on the needs of deaf and hard of hearing consumers. Retail representatives should know, at a minimum, that different phones react differently with different hearing aids. They should be encouraged to offer service contracts with 10-day cancellation clauses so that consumers can have the opportunity to determine if they are able to effectively use the service. The accessories such as neck loops and headsets should be readily available. In addition, a consumer who is deaf or hard of hearing should have the right to return a phone which interferes with his or her hearing technology without incurring any penalty or additional cost.

Finally, we believe that the transition period must be short and specifically defined. Given the fact that deaf and hard of hearing consumers have already been denied access to this technology for more than six years, we believe that the Commission should establish a deadline of no more than two years for full

accessibility.

IV Conclusion

AG Bell strongly supports the decision of the FCC to open Rulemaking on the issue of revoking or limiting the exemption for digital wireless phones from the provision of the HAC Act. We are convinced that the conditions of the market for digital wireless telephone service have reached the point where the statute requires the Commission to make such a revocation. The potential to provide this increasingly vital service to consumers who are deaf and hard of hearing has never been greater, yet the failure of the industry's voluntary efforts to make adequate progress to this goal forces us to only one conclusion: People who rely on hearing aids and cochlear implants will never have an assurance of obtaining a useable wireless phone unless the Commission steps in. Without a significant change in the regulation, these consumers will be left in the second class citizenship of inferior, more expensive analog service, or cumbersome, expensive plug in devices. We strongly encourage the Commission to remove the exemption for digital wireless phones.

Respectfully submitted

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